

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) In a method for treating cytological or histological specimens in an automatic stainer or in a tissue processor, said specimens being delivered by means of a transport device to various processing stations, inserted there, and treated in accordance with a definable processing program, the improvement comprising the step of:
optimizing throughput on the basis of minimal movement distances of said transport device for a given spacing of said processing stations.
2. (original) The improvement as defined in Claim 1, wherein said movement distances of said transport device are minimized by means of a mathematical model.
3. (original) The improvement as defined in Claim 2, wherein said mathematical model comprises a graph theory approach.
4. (original) The improvement as defined in Claim 2, wherein said mathematical model comprises a network planning technique.
5. (original) The improvement as defined in Claim 1, wherein said movement distances of said transport device are minimized by arranging or rearranging the processing stations that are to be traveled to in a defined sequence in order to execute said processing program.
6. (original) The improvement as defined in Claim 1, wherein the transport device can move to other processing stations during the treatment of further specimens, so that concurrent processing, in different processing stations in accordance with multiple processing programs, is possible in throughput-optimized fashion.
7. (original) The improvement as defined in Claim 2, wherein said mathematical model is executed by a computer integrated into said automatic stainer or tissue processor.
8. (original) The improvement as defined in Claim 2, wherein said mathematical model is executed by an external computer.
9. (previously amended) The improvement as defined in Claim 8, wherein said external computer is a personal computer.
10. (currently amended) In a method for treating cytological or histological specimens in an automatic stainer, said specimens being delivered by means of a transport device to various reagent stations in the automatic stainer, inserted there, and treated in accordance with a definable processing program, the improvement comprising the step of:
optimizing throughput on the basis of minimal movement distances of said transport device for a given spacing of said processing stations.